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Genus *Hypatima* Hübner and Allied Genera from Thailand (Lepidoptera, Gelechiidae)

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Four species of the genus *Hypatima* Hübner, *H. pentagonia* sp. nov., *H. acicula*, sp. nov., *H. ovata* sp. nov., and *H. stenosa* sp. nov., and a species of *Capidentalia* Park, *C. khaoensis* sp. nov., are described as new to science from Thailand. Six species belonging to the genus *Hypatima* and allied genera, *H. anguinea* (Meyrick), *H. iophana* (Meyrick), *H. arignota* (Meyrick), *H. haligramma* (Meyrick), *Faristenia polemica* (Meyrick), and *Dendrophilia* (*Dendrophilia*) *hetaeropsis* (Meyrick), are reported for the first time from Thailand. Descriptions and illustrations of male and female genitalia for the known and new species of the genera *Hypatima* and *Capidentalia* are provided, and brief taxonomic data for the species of *Faristenia* and *Dendrophilia* are given.

Key Words: Lepidoptera, Gelechiidae, *Capidentalia*, *Dendrophilia*, *Faristenia*, *Hypatima*, Thailand.

Introduction

The genus *Hypatima* and its allies, with about 120 species all over the world, are mostly distributed in the Oriental and Australian Regions, and the rest occur in the Palaearctic and Ethiopian Regions, with a single species in the Nearctic Region. Recently Ponomarenko (1991, 1993) erected the new allied genera *Faristenia* and *Dendrophilia* by splitting them off from *Hypatima*, and she described seven new species of *Faristenia*, two new species of *Hypatima*, and eight species of *Dendrophilia* from the Russian Far East. Park (1993) reviewed 16 species of the *Hypatima*-group from Korea, with descriptions of five new species. Recently Park (1995) erected a new genus *Capidentalia*, also splitt off from *Hypatima*, based on material of the *Hypatima*-group from Taiwan, and he reported 18 species including five new species. Later Ponomarenko (1995) reviewed the genus *Capidentalia* with descriptions of two new species. In spite of the abundance of the *Hypatima*-group in the Oriental Region, no species has been reported from Thailand to date.

The material examined was mainly that in the Natural History Museum, London, collected by Dr. I. J. Kitching and Mr. A. M. Cotton from Thailand during 1988-1994, and some additional material was collected by the first author and Dr. A. Lewvanich, Bangkok. Type depositories are noted under the material of each species, abbreviated as follows: BMNH-The Natural History Museum, formerly British Museum (Natural History), London; EZDAB-Entomology and Zoology Division, Department of Agriculture, Bangkok; CIS-Center for Insect Systematics, Korea.

Systematics

Genus ***Hypatima*** Hübner [1825]

Hypatima Hübner, [1825]: 45. Type-species: *Tinea conscriptella* Hübner, [1805]. For extensive synonymies, see Park 1993: 27; Ponomarenko 1997: 37.

Hypatima anguinea (Meyrick, 1913)

(Figs 1, 12, 12a-b, 13, 21)

Chelaria anguinea Meyrick, 1913: 161 (Type locality: Khasis, India.); Meyrick 1925: 157; Gaede 1937: 408; Clarke 1969 (6): 406, pl. 202, figs 2-2b.

Hypatima anguinea: Ponomarenko 1997: 37.

Diagnosis. The species is easily separable from its allies by the characteristic shape of the labial palpus, male genitalia, and eighth tergite: Second segment of labial palpus with two long scaletufts near base and apex, hollowed medially; third as long as second, with an erected scaletuft beyond middle dorsally; eighth tergite triangular with narrowing at middle; male genitalia with vinculum quadrate laterally and distal part of cucullus three times as wide as its basal part. Forewing 14-15 mm in length; several scaletufts scattered irregularly.

Male genitalia (Figs 12, 12a-b, 13). See also Clarke (1969 (6): pl. 202, figs 2a-2b).

Female genitalia (Fig. 21). Female genitalia are examined and illustrated for the first time. Ovipositor extremely short. Apophyses posteriores almost two times as long as apophyses anteriores. Eighth sternite with honeycomb-pattern pouch bearing microtrichia on each side of ostium. Ostium placed near anterior margin of eighth sternite. Antrum sclerotized posteriorly. Ductus bursae narrow, about 2/3 length of corpus bursae. Corpus bursae large, oval, with large, funnel-like signum.

Material examined. 1♂, NW Thailand, Chiang Mai, Doi Suthep-Pui NP, 1380 m, 24. II. 1989 (I. J. Kitching and A. M. Cotton); 1♂, 1♀, same locality, 1460 m, 7. III. 1989 (I. J. Kitching and A. M. Cotton).

Distribution. Thailand (new record), India (Meghalaya).

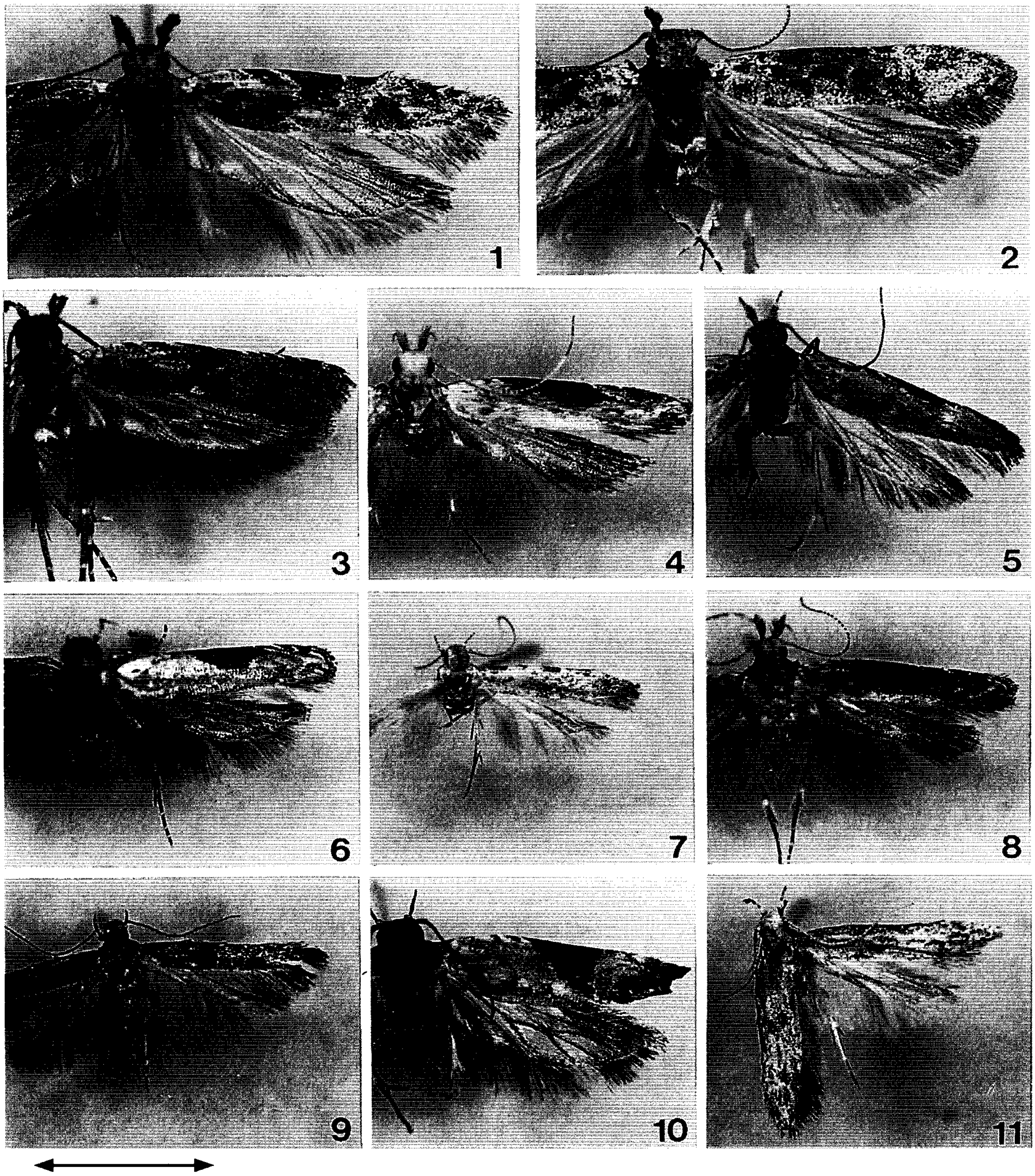
Hypatima iophana (Meyrick, 1913)

(Figs 2, 14, 14a-c, 24)

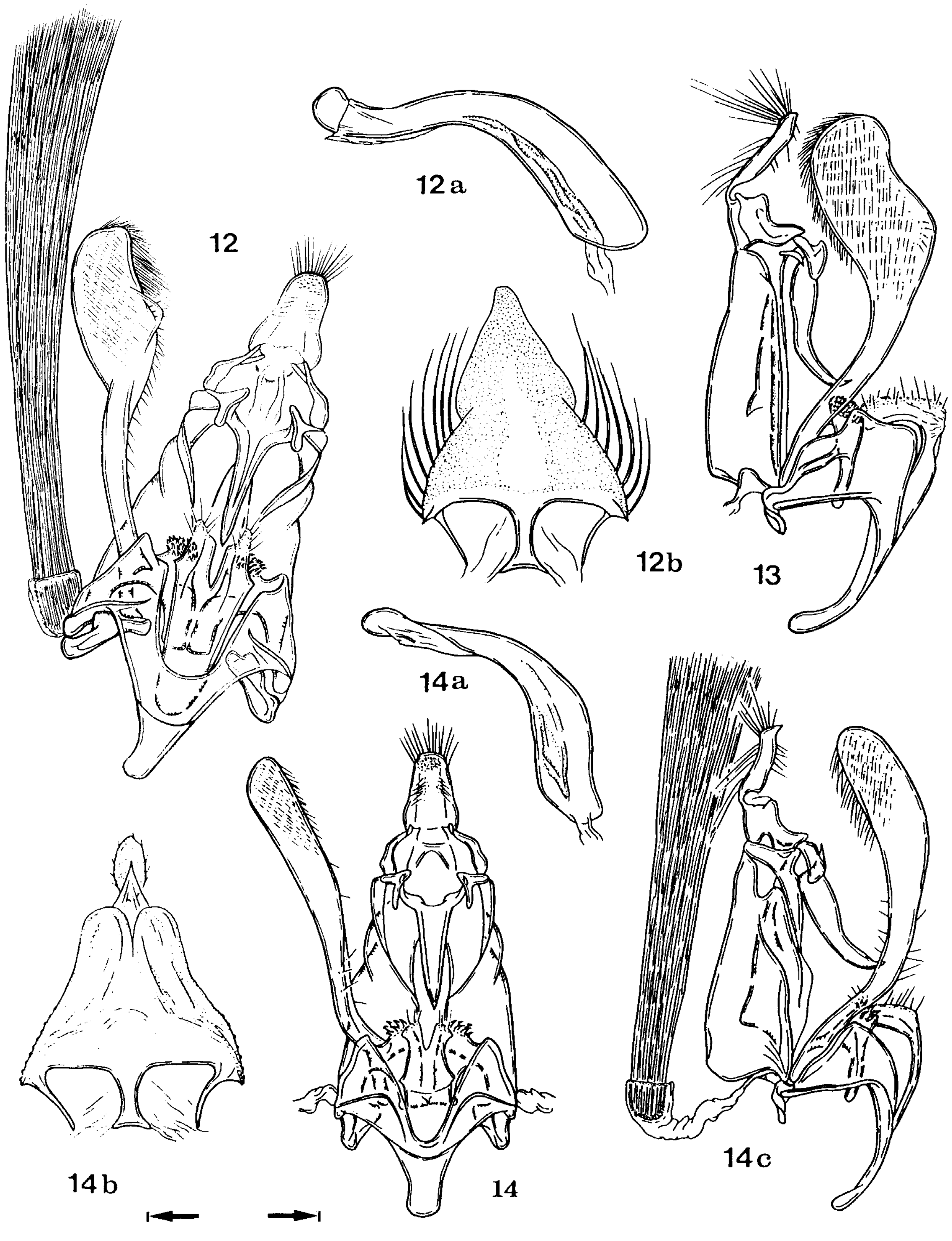
Chelaria iophana Meyrick, 1913: 162 (Type locality: Mowbray, Ceylon (Sri Lanka).); Meyrick 1925: 156; Gaede 1937: 412; Clarke 1969 (6): 414, pl. 206, figs 2-2c.

Hypatima iophana: Park 1995: 71, figs 2, 22-24, 75; Ponomarenko 1997: 39.

Diagnosis. The species is separable from its allies and the preceding species by the following characters: Second segment of labial palpus with ventral scaletufts similiar to those of the preceding species, but much shorter; third segment with two scaletufts before and beyond middle dorsally; eighth tergite divided into two rounded lobes distally and with oval, setose sclerite at apex; vinculum triangular laterally; distal part of cucullus twice as wide as its basal part in male genitalia. Forewing length 15.0-15.5 mm, scaletufts scattered irregularly on upper surface; a



Figs 1-11. Adults. 1, *Hypatima. anguinea* (Meyrick); 2, *H. iophana* (Meyrick); 3, *H. pentagonia* sp. nov.; 4, *H. acicula*, sp. nov.; 5, *H. ovata* sp. nov.; 6, *H. arignota* (Meyrick); 7, *H. stenosa* sp. nov.; 8, *H. haligramma* (Meyrick); 9, *Capidentalia khaoensis* sp. nov.; 10, *Faristenia polemica* (Meyrick); 11, *Dendrophilia hetaeropsis* (Meyrick). (scale bars: 0.4 mm for Nos 1-2 and 0.5 mm for others).



Figs 12-14. Male genitalia: 12, *Hypatima. anguinea* (Meyrick), ventral aspect; 12a, ditto, aedeagus; 12b, ditto, eighth tergite; 13, ditto, lateral aspect; *14, H. iophana* (Meyrick), ventral aspect; 14a, ditto, aedeagus; 14b, ditto, eighth tergite; 14c, ditto, lateral aspect. (sacel bars: 0.5 mm).

broad orange fascia stretched from 1/5 to 3/5 of wing length, reaching 2/3 distance across wing. For a detailed description, see Park (1995: 71).

Male genitalia. (Figs 14 and 14a-c). See Clarke (1969 (6): pl. 206, figs 2a-2c) and Park (1995, figs 22-23).

Female genitalia. (Fig. 24). Female genitalia are examined and illustrated for the first time. Ovipositor very short. Papillae anales slightly sclerotized laterally. Apophyses anteriores about 1/2 length of apophyses posteriores. Eighth segment with band-like sclerotization on posterior margin and with honeycomb pattern on ventral part bearing microtrichia. Ostium placed near anterior margin of eighth sternite, edged by arched sclerite distally. Ductus bursae membranous, as long as corpus bursae, dilated anteriorly. Corpus bursae large, membranous, with large, rhomboidal signum.

Material examined. 1♂, N Thailand, Nan, 61 km on Pua to Bo Kleuard (Hwy 1081), 800 m, 12. IX. 1990 (I. J. Kitching & A. M. Cotton); 1♀, S Thailand, Yala, 56 km on Yala to Betong road, 175 m, 12. VIII. 1990 (I. J. Kitching & A. M. Cotton).

Distribution. Thailand (new record), Sri Lanka, Vietnam, Taiwan, Java.

Hypatima pentagonia sp. nov.

(Figs 3, 15, 15a-c)

Diagnosis. The new species resembles *Hypatima tephroptila* (Meyrick, 1931), but it can be easily distinguished by the narrower and darker forewing with grayish-brown spots at the cell and along the dorsal margin. In the male genitalia, it is also separable by the relatively short valva, broadened uncus with two denticles distally, and wedge-shaped emargination on the posterior margin of the vinculum.

Description. Male. Forewing length 15 mm. Head covered with appressed shiny brown scales from frons to vertex. Thorax brown, densely speckled with dark brown scales. Tegula pale brown, speckled sparsely with dark brown scales. Antenna with relatively short scape; flagellum not ciliate ventrally, upper surface brown, not distinctly annulated before middle, with three yellowish white rings beyond 4/5 length; lower surface yellowish white. Second segment of labial palpus with long, hair-like scales beneath; outer surface dark brown near base, with a broad pale orange band before middle, a brown narrow band beyond middle, and two narrow brown stripes preapically; inner surface concolorous with outer surface; third segment slightly longer than second, stout, with a brown subbasal band and a brownish scaletuft near middle dorsally. Forewing elongate, more or less lanceolate; ground-colour yellowish white, densely speckled with brown scales irregularly; median costal patch small, dark brown, triangular, sharply pointed apically, with two yellowish white stripes before it and six similar stripes beyond it along costa to apex; a dark brown subbasal streak at near base of cell, accompanied by five to six dark spots towards costal patch; several dark brown streaks running horizontally from near end of cell towards apex; cilia grayish brown. Hindwing gray; apex acute; termen heavily sinuate; cubital pecten lacking.

Male genitalia (Figs 15, 15a-c). Uncus emarginated laterally, with two sharp denticles distally. Tegumen dilated towards base. Gnathos relatively short, triangularly expanded at base, almost as wide as distal part of tegumen; apex not sharply pointed. Valva relatively short, with outwardly expanded distal part beyond

1/2 length; its ventral margin almost straight, with almost right angle at end. Valvella stretched distally, slightly longer than 1/3 length of valva, with strong spines along outer margin near apex. Vinculum with deep, wedge-shaped emargination on distal margin; saccus short, dilated at apex. Aedeagus slender, slightly dilated towards base, gently arched, with apex truncated obliquely. Eighth tergite trapezoidal, lacking hairlike tufts. Genitalia of this species heavily sclerotized.

Types. Holotype: ♂, NW Thailand, Chiang Mai, Doi Suthep-Pui Np, 1380 m, 24. II. 1989 (I. J. Kitching and A. M. Cotton). Paratype: 1♂, same locality as holotype, 22. II. 1989 (I. J. Kitching and A. M. Cotton). Types to BMNH. on indefinite loan from EZDAB.

Distribution. Thailand.

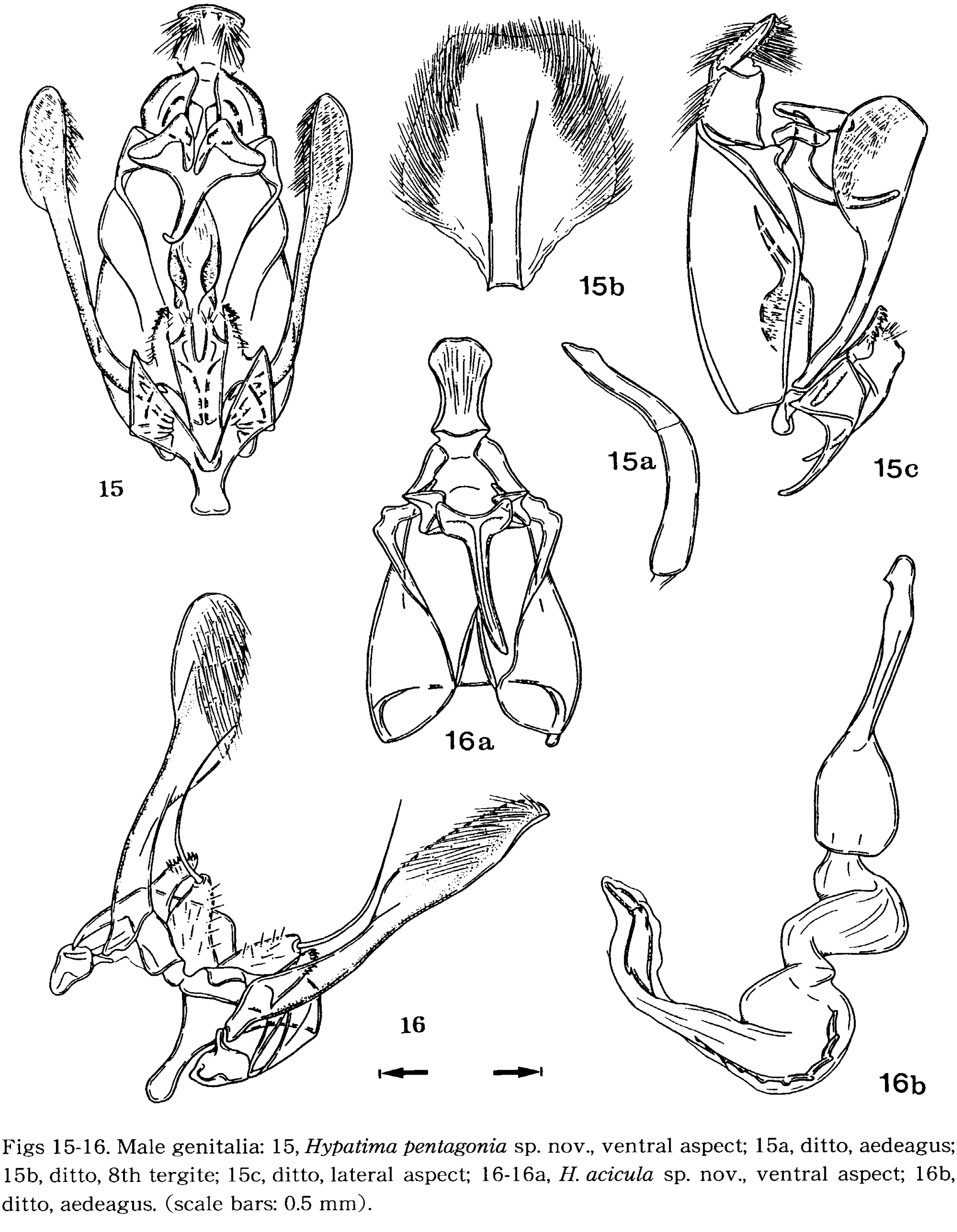
Etymology. The specific name is derived from Greek "pente" meaning five and "gonia" meaning angle, corresponding to the shape of the abdomen's eighth tergite.

Hypatima acicula sp. nov.
(Figs 4, 16, 16a-b)

Diagnosis. The species resembles *Hypatima disetosella* Park, 1995 and *H. issikiana* Park, 1995. It can be separated from *H. disetosella* by the whitish orange ground-colour of the forewing, and from *H. issikiana* by the elongated costal patch arising from about 1/5 wing length rather than from the middle. The male genitalia are closely similar to those of *H. disetosella* and *H. issikiana*, but differ by the uncus narrowing laterally, the valva with a wider distal part, and the juxta with lobes bearing longer needle-like setae apically.

Description. Male. Forewing length 13 mm. Head covered with shiny orange-white scales from frons to vertex. Thorax and tegula pale orange. Antenna not ciliate ventrally, with dark brown rings beyond 3/4 length. Second segment of labial palpus with long, loose, hair-like scales ventrally; outer surface with dark brown stripe near middle and broad, brown band near middle, orange white beyond it; third segment slightly longer than second segment, slender, with two distinct oblique stripes near middle. Forewing elongate; ground-colour light orange; median costal patch dark brown, elongated, extending from 1/5 to 3/5 length of costa, sharply pointed apically, accompanied by grayish orange stripe; three to four small, dark brown patches before apex separated by whitish short streaks; several irregular streaks present from beneath cell to tornus, and a well developed dark streak beyond cell; apex obtuse, margined by dark brown cilia; cilia pale grayish orange, dark brown at apex. Hindwing gray; apex acute; cubital pecten lacking.

Male genitalia (Figs 16, 16a-b). Uncus narrowed laterally, less than twice as long as width. Tegumen dilated towards base. Gnathos relatively stout, heavily sclerotized, hook-like, pointed at apex. Valva narrow at basal half and dilated beyond it, distal part densely setose. Valvella about 1/5 length of valva, with strong spines along ventral margin near apex. Juxta with a pair of conical setose lobes, each bearing a long, needle-like seta at apex. Vinculum emarginate posteriorly; saccus narrowed towards apex, with a round apex. Aedeagus inflated basally, width of its basal part about four times that of distal part, with a small ventral denticle before apex; ductus ejaculatorius with a track-like sclerotization. Genitalia lacking hair-like tufts.



Figs 15-16. Male genitalia: 15, *Hypatima pentagonia* sp. nov., ventral aspect; 15a, ditto, aedeagus; 15b, ditto, 8th tergite; 15c, ditto, lateral aspect; 16-16a, *H. acicula* sp. nov., ventral aspect; 16b, ditto, aedeagus. (scale bars: 0.5 mm).

Type. Holotype: ♂. S Thailand, Khaoyai, 20-24. VIII. 1990 (K. T. Park), genitalia slide no. 4045/Park. Type is in EZDAB.

Distribution. Thailand.

Etymology. The specific name is derived from Latin "acus", corresponding to the needle-like seta on the apices of the juxta lobes in the male genitalia.

Hypatima ovata sp. nov.

(Figs 5, 17, 17a-b)

Diagnosis. This new species superficially resembles *Hypatima silvestris* (Meyrick, 1913), but it can be separated by the smaller trapezoidal costal spot on the forewing, and the uncus with convex lateral margins and valva with a round distal part in the male genitalia, whereas the valva of *Hypatima silvestris* is more or less triangular distally and curved dorsally.

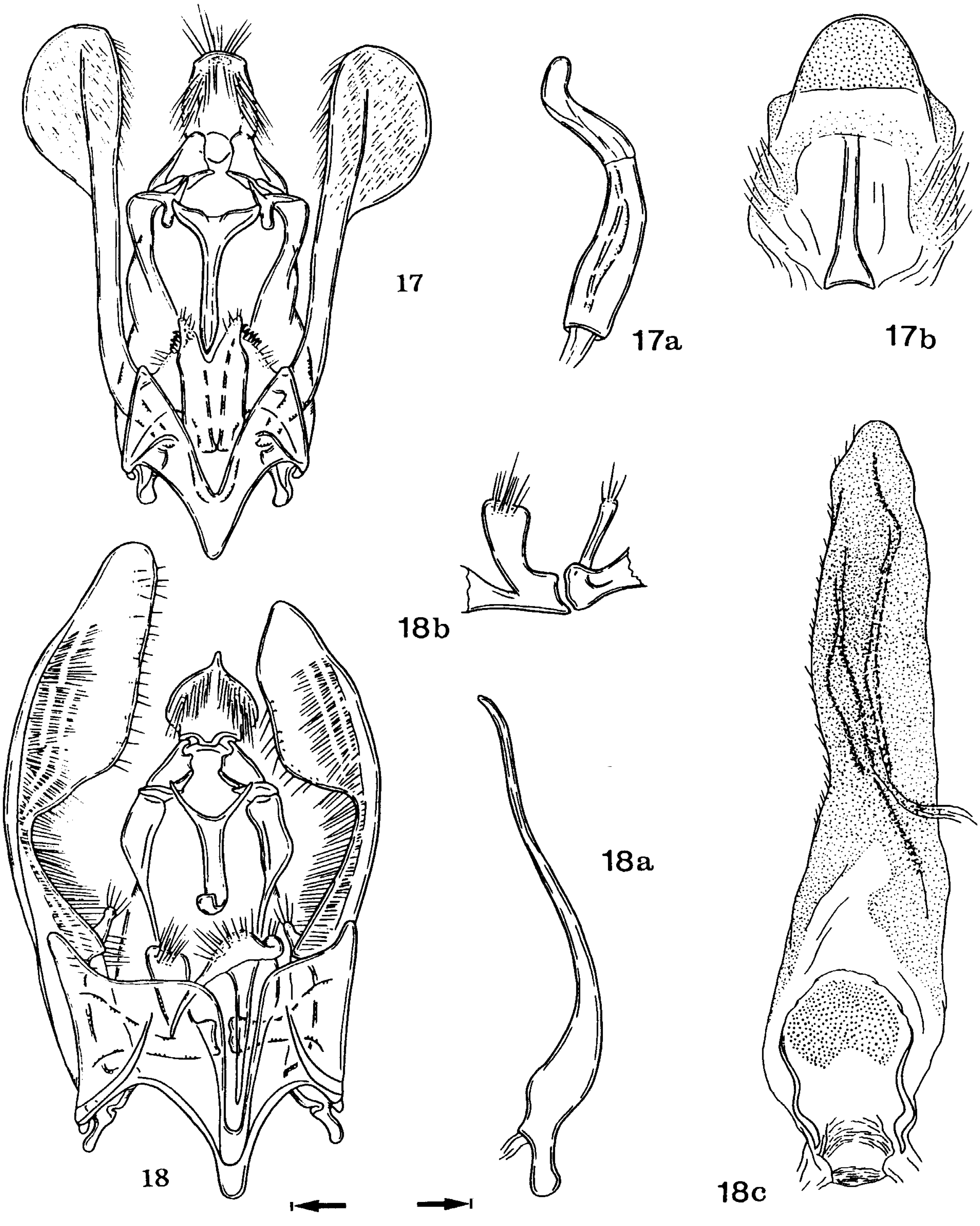
Description. Male. Forewing length 14 mm. Head covered with pale brownish orange scales. Tegula and thorax concolorous, brownish orange. Antenna not ciliate ventrally; dark brown rings on dorsal surface of flagellum distinctly developed beyond half. Basal segment of labial palpus yellowish white, with small, dark brown spot near apex; second segment with long, loose hair-like scaletuft ventrally; outer surface with large, dark brown basal spot and brown median band; inner surface yellowish white; third segment with dark, narrow basal stripe, dark brown fascia divided by yellowish white stripe medioventrally, and brown raised scaletuft beyond middle dorsally; apex yellowish white. Ventral surface of legs brown, speckled with yellowish white scales. Forewing narrowed towards apex; ground colour pale grayish orange, densely covered with brown scales throughout; median costal patch elongated and trapezoidal, separated by grayish orange stripe basally and accompanied by small, dark patch bordered with a grayish orange stripe; subbasal streak distinctly developed; two to three small, short streaks near end of cell; submarginal streak dark brown, linear, extending longitudinally to termen; cilia pale grayish orange, brown near apex. Hindwing gray, apex sharply pointed; termen sinuated; cubital pecten lacking.

Male genitalia (Figs 17, 17a-b). Uncus narrowed towards apex, with long setae on distal margin. Tegumen dilated towards base. Gnathos relatively stout, with pointed apex. Valva roundly expanded in distal part, ventral margin almost straight, whereas valva of *Hypatima silvestris*. (Meyrick) more or less triangular, and curved dorsally. Valvella with strong spines at apex, slightly shorter than 1/3 length of valva. Aedeagus S-shaped, curved ventrally at preapex, more strongly than that of *H. silvestris*. Vinculum with deep, wedge-shaped emargination on posterior margin; saccus triangular, relatively short. Eighth tergite egg-shaped, with well sclerotized, long plate mesally; hairpencil tufts lacking.

Type. Holotype: ♂, Thailand, Chiang Mai, Doi Suthep-Pui NP, San Kuu, 1640 m, 22. IV.-6. V. 1994 (I. J. Kitching and A. M. Cotton). Type to BMNH, on indefinite loan from EZDAB.

Distribution. Thailand.

Etymology. The specific name is derived from Latin "ovatus", corresponding to the egg-shaped eighth tergite of the abdomen.



Figs 17-18. Male genitalia: 17, *Hypatima ovata* sp. nov., ventral aspect; 17a, ditto, aedeagus; 17b, ditto, eighth tergite; 18, *H. arignota* (Meyrick), ventral aspect; 18a, ditto, aedeagus; 18b, ditto, lobes of valvellae; 18c, ditto, eighth tergite. (scale bars: 0.5 mm).

Hypatima arignota (Meyrick, 1916)
(Figs 6, 18, 18a-c)

Chelaria arignota Meyrick, 1916: 579 (Type locality: Maymyo, Upper Burma.); Gaede 1937: 408; Clarke 1969(6): 406, pl. 202, figs 4-4c.
Chelaria obtruncta Meyrick, 1923: 30. (Type locality: Assam, Shilong.)

Diagnosis. The species is characterised by the tibiae of the middle legs being yellowish white on the basal 3/5 and dark brown beyond, with whitish scales at the tip. Thorax orange white with three dark brown spots on lateral margin and at distal end. Second segment of labial palpus with long, hair-like scaletuft ventrally; outer surface yellowish white at base and beyond middle, with broad, brown band before middle; inner surface yellowish white throughout; third segment as long as second one, with weakly developed dorsomedian scaletuft. Forewing length 12-13mm; ground colour orange white; median costal patch more or less trapezoidal, extending from 1/3 to 2/3 wing length, reaching more than half way across wing; three small, dark fuscous patches cut off by fine white strigulae beyond costal patch; a grayish orange, long, straight streak running from end of costal patch to near apex. Female genitalia of this species are illustrated by Clarke (1965).

Male genitalia (Figs 18, 18a-b). Male genitalia are described and illustrated for the first time. Uncus helmet-like, with pointed apex. Tegumen dilated towards base. Gnathos hook-like, but apex not sharply pointed. Valvae extremely narrowed at middle ventrally and expanded distally, asymmetrical; left valva longer than right one, both valvae dilated distally, with small lobe on medial surface at about 1/4 length. Valvellae asymmetrical; left one narrowed basally, with apex broad and distal margin truncated; right one digitate. Juxta asymmetrical, with two rounded lobes distally. Vinculum extremely broad, with extended lateral angles; saccus short. Aedeagus slender, as long as right valva, slightly sinuous. Eighth tergite more or less oval and placed beneath the large membranous intrasegmental sack everted caudally; hairpencil tufts lacking.

Female genitalia. See Clarke (1969 (6): pl. 202, figs 4-4c).

Material examined. 1♂, S Thailand, 56 km, Yala, 175 m, 4. XII. 1991 (I. J. Kitching and A. M. Cotton); 1♂, S Thailand, SE Yala, Khao Beu Yaul, 340 m, 3. XII. 1991 (I. J. Kitching and A. M. Cotton), in BMNH. 1♂, Khaoyai, Thailand, 20-24. VIII. 1990 (K. T. Park), genitalia slide no. 4048/Park, in CIS.

Distribution. N India (Assam), Myanmar, Thailand.

Remarks. The species was described from Myanmar based on a single female. Park (1995) identified Taiwanese specimens as *H. arignota* and stated that the female genitalia were identical to those of the type specimen. However, after detailed reexamination the present authors found that the female genitalia of the Taiwanese species are not identical with those of *H. arignota*, but exhibit some remarkable differences: Distal margin of eighth tergite of *H. arignota* smoothly incurved, but convex in Taiwanese specimen; ductus bursae longer in the latter. Considering the distributional ranges of the two forms, the Taiwanese one does not belong to *H. arignota*, but to an undescribed species. The male genitalia of the Taiwanese form are quite different from those described from Thailand (see Park 1995: 75, figs 28-31). In this respect, the Thailand specimen well agrees with *H. arignota*, but its identy can not be confirmed without knowledge of the female genitalia. Thus, the authors tentatively identify the Thailand species as *H. arignota*, based only on external characters.

Hypatima stenosa sp. nov.

(Figs 7, 19, 19a-b)

Diagnosis. This new species closely resembles *Hypatima orthomochla* (Meyrick, 1932), which described from Java. According to the description of the latter species, this new species can be separated by the labial palpus with the third segment are almost as long as the second, and by the forewing with a free M_1, in *H. orthomochla* the third segment of the labial palpus is much longer than the second and the forewing has M1 stalked with R_{4+5}. Unfortunately, the holotype of *H. orthomochla* is preserved in extremely bad condition without its abdomen, and we could not compare its genitalia.

Description. Male. Forewing length 9.0 mm. Head yellowish white anteriorly and irrorated with pale brown scales posteriorly. Antenna not ciliate, with well defined dark brown rings dorsally. Second segment of labial palpus triangularly expanded anteriorly, without hair-like loose scales ventrally; outer surface brown,, with a yellowish white narrow band at 2/5 length and apical 1/5 white; third segment almost equal in length to second, with four dark rings including subapical one. Forewing elongate, narrow; ground-colour yellowish white, with irregularly scattered brown scales; subbasal costal patch large, trapezoidal, as large as median one; other costal patches placed before and beyond median patch; subbasal streak small, weak; a brown fascia at middle of plica, as large as median costal patch, and similar fascia beneath it on dorsum; apex rather acute; eight to nine short setae obliquely placed on dorsal side beneath anal vein (for a detail description of the accessory wing-coupling mechanism in *Hypatima*-group, see Ponomarenko 1993: 59-61, fig. 8), prior to 1/4 length; R_4 and R_5 stalked before middle; R_5 running to costa; M_1 running closely to R_{4+5}; M_2 and M_3 stalked; CuA_1 arising closer to CuA_2 than to M_3 at base; Cu A_2 arising slightly prior to base of R_2. Hindwing narrow, gray; cell opened; cilia almost twice as long as wing width; apex sharply pointed; termen sinuate.

Male genitalia (Figs 19, 19a-b). Uncus relatively narrow, elongate, with wrinkled, oval apex. Tegumen dilated towards base. Gnathos long, with narrow stalk and roundly dilated apex, more or less gutter-like. Valva slender, narrowed before 1/6 length and dilated towards apex, with a long, strong seta at 2/3 length; ventral margin with short, strong setae in a row. Valvella rather small, shorter than 1/4 length of valva; apex curved ventrally. Juxta with two triangular lobes, heavily ankylosed with vinculum. Aedeagus as long as valva, slightly inflated at base, with three to four lateral lobes and triangular apical sclerotized plate.

Type. Holotype: ♂, S Thailand, Khaoyai, 20-24. VIII. 1990 (K. T. Park); deposited in EZDAB

Distribution. Thailand.

Etymology. The specific name was derived from Greek “stenos”, meaning narrow and corresponding to the narrow forewing.

Hypatima haligramma (Meyrick, 1926)
(Figs 8, 20)

Chelaria haligramma Meyrick, 1926: 282 (Type locality: Anakapalle, India.); Gaede 1937: 408; Clarke 1969 (6): 413, f. 3.
Hypatima haligramma: Sattler and Stride 1989: 414, figs 2-3.

Diagnosis. This species is closely related to *H. mangiferae* Sattler, 1989 described from East Africa. It can be distinguished by the median costal markings of the forewing which are narrower towards the apex, an oblique, orange streak extending to the apex without interruption, and the rhomboidal zone- surrounded ostium lacking microtrichia in the female genitalia. The male is unknown.

Female genitalia (Fig. 20). Ovipositor extremely short; membrane between eighth and ninth segments about 1/5 length of papillae anales. Papillae anales membranous. Apophyses anteriores about 1/3 length of apophyses posteriores. Sclerotized part of eighth sternite relatively strong and hollowed. Ostium placed in middle of membranous part of eighth sternite and surrounded by honeycomb pattern set with microtrichia except for rhomboidal zone around ostium being smooth and lacking microtrichia. Antrum slightly sclerotized. Anterior margin of eighth sternite with two small pouches. Ductus bursae narrow, slightly dilated towards corpus bursae. Corpus bursae membranous, oval; signum large, hatshaped, rounded anteriorly, with anterior part covered with strong spines and posterior ridge serrated.

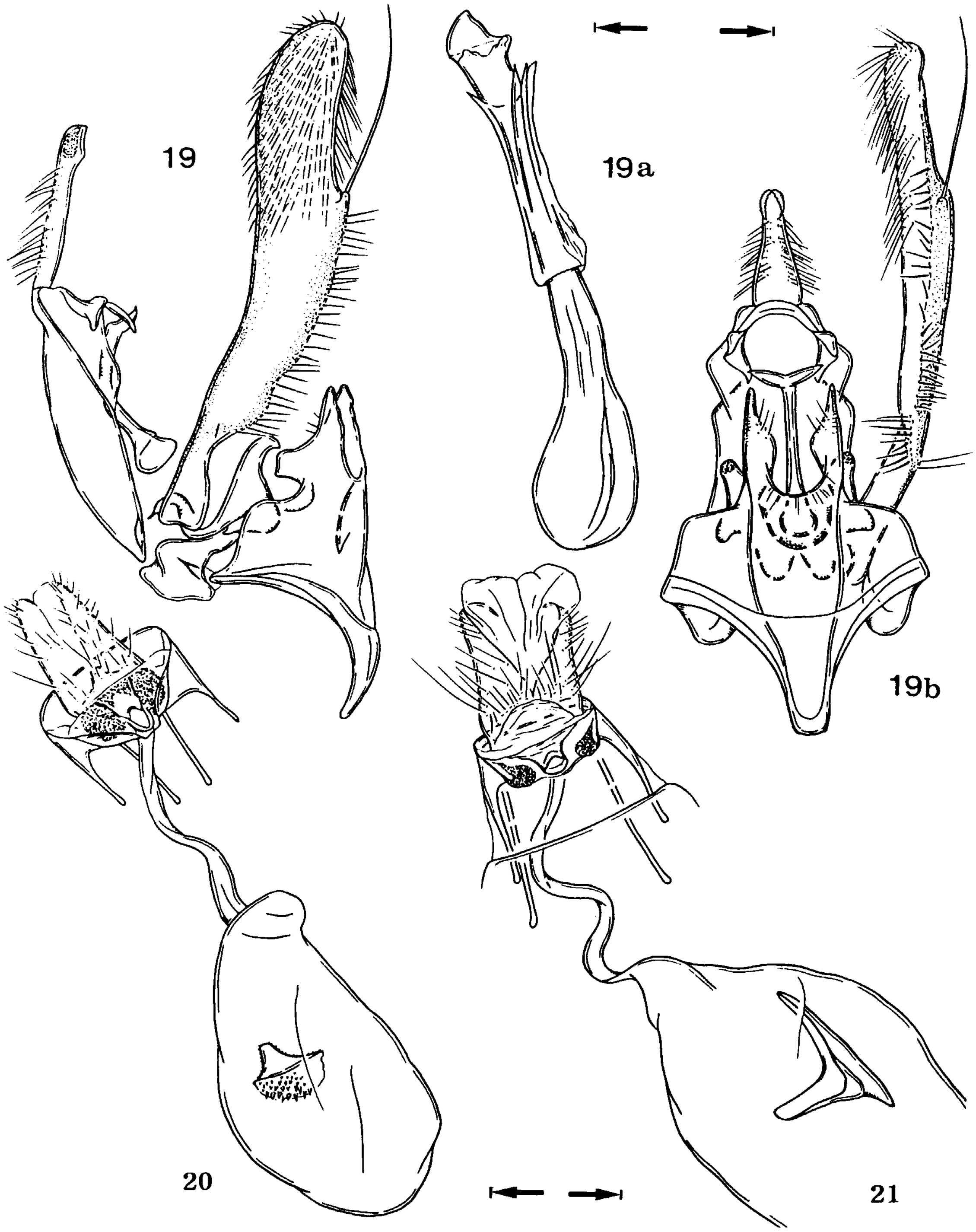
Material examined. 1♀, Khao Yai, Thailand, 20-24. VIII. 1990 (K. T. Park), genitalia slide no. 4046/Park; 2♀, same data as preceding specimen; 1♀, N Thailand, Nan, 33.8km, Doi Phu Kha NP, 1640m, 26-30. XII. 1991 (I. J. Kitching and A. M. Cotton); 1♀, same locality, 26-30. XII. 1991 (I. J. Kitching and A. M. Cotton).

Distribution. S India, Thailand.

Remarks. Four species of the genus *Hypatima*, *H. haligramma* and *H. rhicnota* (Meyrick, 1916) from S India, *H. spathota* (Meyrick, 1913) from India, Sri Lanka, Java, Taiwan, Australia, and Japan, and *H. mangiferae* Sattler, 1989 from Kenya, are known to be associated with the mango tree, *Mangifera indica* (Anacardiaceae). Sattler and Stride (1989) noted that *H. mangiferae* is closest to *H. haligramma*, and both species are of equal size and externally very similar. Unfortunately we could not compare the genitalia of the specimens from Thailand with those of *H. haligramma* because the female of the latter is unknown. Therefore we tentatively identify the species from Thailand as *H. haligramma*, based on their superficial features. The host plants of *H. disetosella* Park and *H. issikiana* Park recently described from Taiwan are unknown, but these two species are closely related to the four species mentioned above in their superficial and genital characters, and are probably also associated with the mango tree.

Capidentalia Park, 1995

Capidentalia Park, 1995: 84. Type-species: *Hypatima claviformis* Park, 1993.



Figs 19-21. Male and female genitalia: 19, male genitalia of *Hypatima stenosa* sp. nov., lateral aspect; 19a, ditto, aedeagus; 19b, ditto, ventral aspect; 20, female genitalia of *H. haligramma* (Meyrick); 21, female genitalia of *Hypatima anguinea* (Meyrick). (scale bars: 0.5 mm).

Capidentalia khaoensis sp. nov.

(Figs 9, 22, 22a-c, 23)

Diagnosis. This species closely resembles *Capidentalia salicicola* Park, 1995 in the forewing pattern, but it is separable from the latter by the male genital characters: left valva expanded to 3/4 length on the inner side, and a lobe arising from the base of the sickle-shaped right valva, which is bent beyond 3/4 length and tapered apically; left lobe of valvella long and large.

Description. Male and female. Forewing length 8-9.5 mm. Head shiny yellowish white with speckling of brown scales sparsely on frons and anterior part of vertex. Thorax and tegula light brown. Antenna not ciliate, with brown ring on flagellum dorsally. Second segment of labial palpus expanded to triangle with scaletuft anterioventrally; outer surface scattered with brown scales; inner surface yellowish white with brown scales ventrally; third segment stout, slightly longer than second, with three yellowish orange stripes, apex brown. Hindtibia brown, with yellowish white bands at base, middle, 3/4 length and apical end; upper surface covered with shiny yellowish white hairs. Forewing narrow, elongate; ground colour and markings no different from those of C. salicicola. Hindwing relatively narrow, gray; apex extremely produced; termen sinuated; cilia on inner margin about three times as long as wing width.

Male genitalia (22, 22a-c). Uncus and gnathos closely resemble those of C. salicicola. Valvae slender, slightly expanded distally, asymmetrical: right valva with sickle-shaped lobe arising from base, slightly longer than 1/2 length of valva; left valva expanded to near 3/4 length on inner side. Left valvella digitate, bent outwardly and shorter than right one; right valvella stout, with rounded apex. Vinculum with three lobes distally, left one long, clavate, middle one short, dome-like, and right one small, 1/3 length of left one. Saccus narrowed to apex, sharply pointed. Aedeagus slightly shorter than valva, inflated in basal 2/5, then slender with round apex; cornutus lacking.

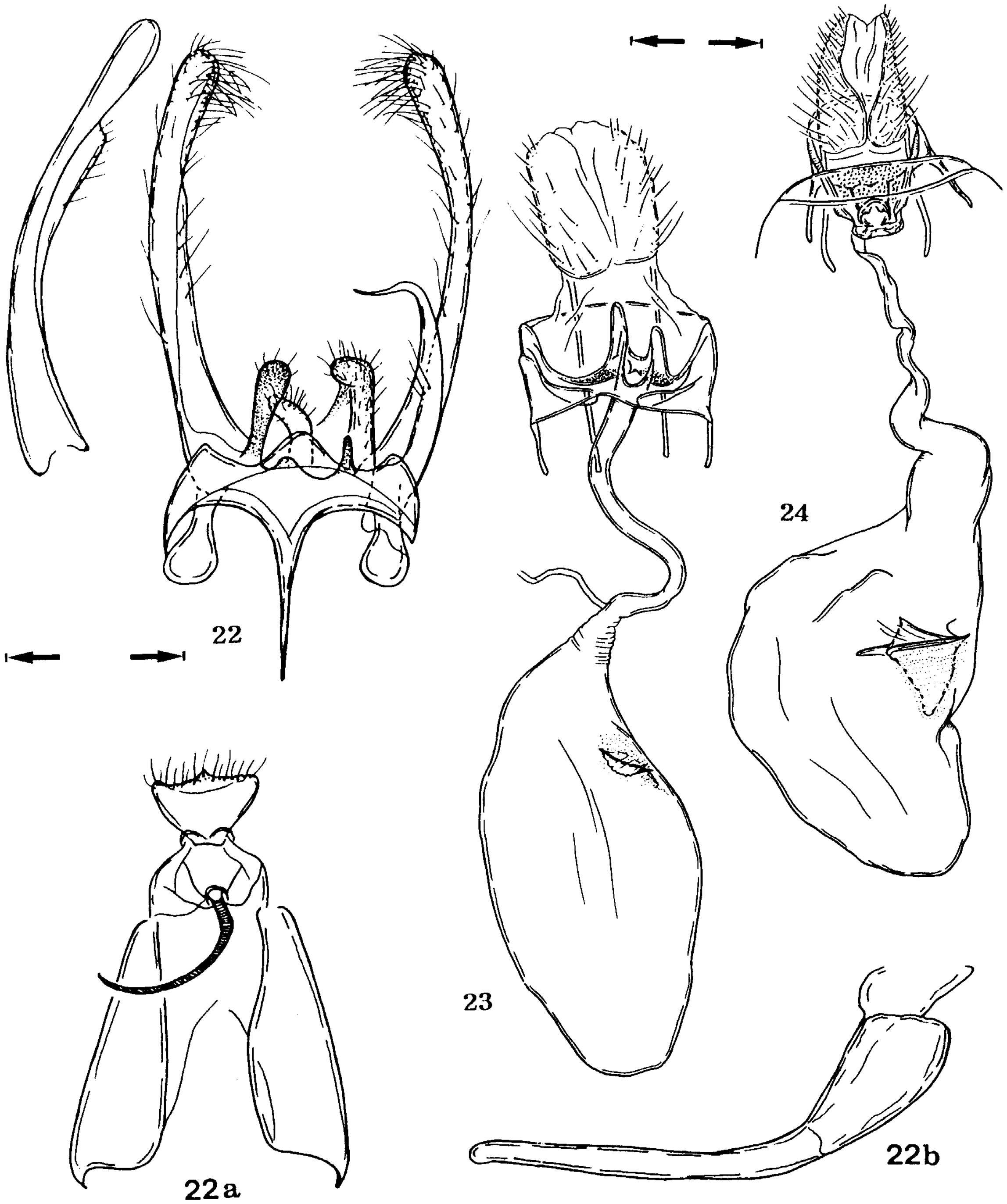
Female genitalia (Fig. 23). Ovipositor very short; membrane between eighth and ninth segments about 1/3 length of papillae anales. Apophyses posteriores twice as long as apophyses anteriores. Eighth sternite with two relatively long lobes at lateral sides of ostium, left lobe longer than right one. Ostium placed near posterior margin of eighth sternite. Antrum weakly sclerotized, relatively long. Ductus bursae slender, narrow, dilated anteriorly, slightly shorter than corpus bursae; ductus seminalis arising from near conjunction. Corpus bursae membranous, ovate; signum gutter-like, with weakly sclerotized plates on upper and lower surfaces.

Types. Holotype: ♂, Khao Soi Dao, Chantha-Buri Prov. (E Thailand near Cambodian border), on longan flower, 21. II. 1990 (A. Lewvanich). Paratypes: 1♂, 2♀, same data as holotype; 1♀, NW Thailand, Chiang Mai, Doi Suthep-Pui NP, 1460 m, 23. II. 1989 (I. J. Kitching & A. M. Cotton). Types to BMNH, on indefinite loan from EZDAB.

Distribution. Thailand.

Host plant. *Dimocarpus longan* Lour.

Remarks. Recently Dr. A. Lewvanich informed the first author that "the longan flowers are in the form of in florescences like mango flowers. I collected one bunch of longan in florescence, the flowers of which were tied together by silken threads produced by larvae of *Autoba* sp. (Noctuidae). After leaving this in florescence for a week in a plastic box, more than 10 species of insect pests emerged, including this *Hypatima* species".



Figs 22-24. Male and female genitalia: 22, ***Capidentalia khaoensis*** sp. nov,. with lateral aspect of left valva; 22a, ditto, tegumen-uncus part; 22b, ditto, aedeagus; 23, ditto, female genitalia; 24, female genitalia of *Hypatima iophana* (Meyrick). (scale bars: 0.5 mm).

Genus ***Faristenia*** Ponomarenko, 1991

Faristenia Ponomarenko, 1991: 601. Type species: *Faristenia omelkoi* Ponomarenko, 1991.

Faristenia polemica (Meyrick, 1935)
(Fig. 10)

Chelaria polemica Meyrick, 1935: 589 (Type locality: Bengal, India.); Clarke 1969 (6): 422, pl. 210, figs 1-1b.
Faristenia polemica: Ponomarenko 1997: 44.

Diagnosis. Forewing length 14 mm. The species can be separated from its allies by the well developed, large, trapezoidal, median costal patch. The valva of the male genitalia, with a process on the ventral margin basally, also can be a good separable character.

Material examined: 1♂, NW Thailand, Chiang Mai, Doi Suthep-Pai Np, 1380 m, 6. II. 1989 (I. J. Kitching & A. M. Cotton). Type is in BMNH.

Distribution. Thailand (new record), India.

Remarks. It is known that the larva rolls leaves of *Michelia campaca* (Magnoliaceae), according to the original description.

Genus ***Dendrophilia*** Ponomarenko, 1993

Dendrophilia Ponomarenko, 1993: 59. Type-species: *Nothris albidella* Snellen, 1884.

Dendrophilia (***Dendrophilia***) ***hetaeropsis*** (Meyrick, 1935)
(Fig. 11)

Chelaria hetaeropsis Meyrick, 1935: 590 (Type locality: Telawa, Java.); Clarke 1969 (6): 414, pl. 206, figs 1-1b.
Dendrophilia hetaeropsis: Ponomarenko 1993: 64.

Diagnosis. Forewing length, 11 mm. It is not easy to separate from each other in the species of this genus, due to similar wing patterns. Only genital characters are helpful to identify it.

Material examined: 1♀, Khaoyai, Thailand, 20-24. VIII. 1990 (K. T. Park).

Distribution. Thailand (new record), Java.

Remarks. It is known that the larva feeds on flowers of "Krandang", which its scientific name is not recognized by authors, according to the original description.

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